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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/832,812	04/12/2001	Andras Sarkozy	115191-004REI	2745
27189 7590 09/21/2009 PROCOPIO, CORY, HARGREAVES & SAVITCH LLP 530 B STREET SUITE 2100 SAN DIEGO, CA 92101				
EXAMINER KIM, HONG CHONG				
ART UNIT		PAPER NUMBER		
2185				
NOTIFICATION DATE		DELIVERY MODE		
09/21/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@procopio.com
PTONotifications@procopio.com

Office Action Summary

Application No.

09/832,812

Applicant(s)

SARKOZY ET AL.

Examiner

Hong Kim

Art Unit

2185

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 and 56-165 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-49 and 56-165 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-49 and 56-165 are presented for examination.
2. Applicant is reminded of the continuing obligation under 37 CFR 1.178(b), to timely apprise the Office of any prior or concurrent proceeding in which Patent No. 5,93,919 is or was involved. These proceedings would include interferences, reissues, reexaminations, and litigation.

Applicant is further reminded of the continuing obligation under 37 CFR 1.56, to timely appraise the Office of any information which is material to patentability of the claims under consideration in this reissue application.

These obligations rest with each individual associated with the filing and prosecution of this application for reissue. See also MPEP §§ 1404, 1442.01 and 1442.04.

3. Any objections or rejections made in the previous office action which are not specifically repeated below are withdrawn.

Amendment to Reissue application

4. The amendment filed 8/6/09 proposes amendments to the claims do not comply with 37 CFR 1.173(b), which sets forth the manner of making amendments in reissue applications. A supplemental paper correctly amending the reissue application is

required. Because in claim 45, "rarity" should be changed to –parity--. See 37 CFR 1.173(b)(3) and MPEP § 1414 and 1453.

Again, the amendments to the claims filed on 8/6/09 is defective for failure to comply with provisions of 37 CFR 1.173.

Although applicant include a very general statement for support for claim changes, however, each change made in the claim is not being accompanied by a concise explanation of the support in the disclosure of the patent for the change made to the claim (i.e., support for all changes made in the claims, whether insertions or deletions) (37CFR 1.173 C and MPEP 1453). In other words, the claimed subject matter for each of the claims is not clearly mapped to the specification by page and line number, and to the drawing, if any, by reference characters. A concise explanation of the subject matter defined in each of the claims involved in the reissue amendment, which must refer to the specification by page and line number, and to the drawing, if any, by reference characters. While reference to page and line number of the specification requires somewhat more detail than simply summarizing the invention, it is considered important to enable the Examiner to more quickly determine where the claimed subject matter is described in the application. Also every means plus function and step plus function as permitted by 35 U.S.C. 112, sixth paragraph, must be identified and the structure, material, or acts described in the specification as corresponding to each claimed function must be set forth with reference to the specification by page and line number, and to the drawing, if any, by reference

characters. Also support for a program storage medium and a computer readable medium should be provided to prevent possible 112 1st paragraph and 101 rejections. Applicant did not clearly point out what is changed in the "Remarks" portion of the amendment. A clear explanation on each of the newly added claims 1-49 and 56-165 should appear in the remarks (see MPEP 1453).

5. Applicant is notified that any subsequent amendment to the specification and/or claims must comply with 37 CFR 1.173(b). In addition, when any substantive amendment is filed in the reissue application, which amendment otherwise places the reissue application in condition for allowance, a supplemental oath/declaration will be required. See MPEP § 1414.01. Applicant is notified that any subsequent amendment to the specification and/or claims must comply with 37 CFR 1.173(b). In addition, when any substantive amendment is filed in the reissue application, which amendment otherwise places the reissue application in condition for allowance, a supplemental oath/declaration will be required. See MPEP § 1414.01.

Election/Restrictions

This application contains claims directed to patentably distinct species of the claimed invention. More specifically, this application appears to contain twelve distinct species of the claimed a mass storage for a protection which are as follows:

- I. A mass storage system protection utilizing parity and mirroring protection (claims 1-10).

- II. A mass storage system protection utilizing user selection commands (claims 105-108, 125-129, 133-138, and 158-160)
- III. A mass storage system protection utilizing parity generation and mirroring (claims 94-99, 112-115, and 139-142).
- IV. A mass storage system protection utilizing strip (claims 84-87, 109-111, 116-117, 118-124, 147, 152, and 161-162).
- V. A mass storage system protection utilizing parity and skew (claims 23-28, 148-150, and 163-165).
- VI. A mass storage system protection utilizing mirroring (claims 11-16, 17-22, and 29-34).
- VII. A mass storage system protection wherein second storage address is located in a disk drive separate from the disk drive containing the first storage address (claims 143-146 and 151).
- VIII. A mass storage system protection utilizing a cache and a hot spare (claims 73-83).
- IX. A mass storage system protection utilizing parity inhibit and off-line parity generation (claims 37-39, 40-41, 42, 43-45, 56-59, 64-72, 153, and 155-157).
- X. A mass storage system protection utilizing data stored without parity (claims 60-63, 100-104, 130-132).
- XI. A mass storage system protection containing other data when the first logical unit is not selected by user from mirroring (claims 88-93).
- XII. A mass storage system protection utilizing storage segments of the mass storage devices not within the logical unit designated for mirroring (claims 35, 36, 46-49 and 154).

These twelve different embodiments or species would appear to be represented by claims above.

Applicant is required under 35 U.S.C. § 121 to elect a single disclosed embodiment or species to which the claims shall be restricted if no generic claim is finally held to be allowable, and to identify those claims readable thereon for prosecution on the merits. Currently, no claim appears to be generic.

There is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one species would not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species to be examined even though the requirement may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected species**, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

The election of the species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the election of species requirement, the

election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected species.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the species unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other species.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141.

In identifying the different species above, the Examiner has attempted to identify the distinguishing characteristics of each of the species, and has also attempted to group the claims in accordance with the species to which they are restricted, since the species cannot be conveniently identified (no separate Figures, e.g.). See MPEP 809.02(a).

6. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and

recognize divergent subject matter, and because the searches required for the different groups is not entirely coextensive restriction for examination purposes as indicated is proper.

7. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(l).

9. If applicant does not distinctly and specifically point out the supposed errors in the restriction requirement, the election will be treated as an election without traverse (M.P.E.P. § 818.03(a)).

10. A shortened statutory period for reply to this action is set to expire thirty days or ONE MONTH, whichever is longer, from the mailing date of this letter.

Conclusion

1. When responding to the office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections. See 37 CFR 1.111(c).
2. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist examiner to locate the appropriate paragraphs.
3. A shortened statutory period for reply to this letter is set to expire ONE (1) MONTH or THIRTY (30) DAYS, whichever is longer, from the mailing date of this letter.
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong C Kim whose telephone number is (571) 272-4181. The examiner can normally be reached on M-F 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sanjiv Shah can be reached on (571) 272-4098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 whose telephone number is (571) 272-2100.

5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6. **Any response to this action should be mailed to:**

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

or faxed to TC-2100:
(571)-273-8300

Hand-delivered responses should be brought to the Customer Service Window (Randolph Building, 401 Dulany Street, Alexandria, VA 22314).

/Hong Kim/
Primary Examiner, Art Unit 2185
September 14, 2009